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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,038	03/03/2004	Melissa K. Rath	ATMI-668	4823

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EXAMINER	
LE, HOA VAN	

ART UNIT	PAPER NUMBER
1795	

MAIL DATE	DELIVERY MODE
09/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/792,038	RATH ET AL.	
	Examiner	Art Unit	
	Hoa V. Le	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 September 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-7,10,14,15,17-21,24-31,33-36,39,43-50 and 53-59* is/are pending in the application.

4a) Of the above claim(s) *7,14,24-31,33-36,39,43-50,54-55 and 58-59* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6,10,15,17-21,53 and 56* is/are rejected.

7)☒ Claim(s) *57* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

This is in response to Papers filed on 09/08/08. I

I. There has been on the record:

The record shows that applicants elect specie of Formula G. It is that:

Upon the allowance of a generic claim (especially, the instant claim 1 is read on the elected Formula G specie) ", applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

II. The elected Formula G with "0.10" of the mixture "oxirane" (being known in the art as ethylene oxide gas form), ("methyl-, polymer with oxirane or mono(octylphenyl)ether" as claimed (has been considered and searched as an agent being in a mixture with an amount of an ethylene oxide gas. A reading in any other way is an issue of a new matter)). The elected species have not been found.

III. Claims 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are two embodiments of "oxirane, methyl-, polymer with oxirane" in the claim. Therefore, the embodiments are rejected as being a double inclusion. According, none of the dependent claims of the independent claim 1 is allowable. The dependent claims of the independent claim 1 are objected to since they are depended on the rejected claim 1.

IV. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 2, 4-7, 10, 14-15, 17-21 and 53-57 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being

unpatentable over claims 1-7, 9-17, 21-22 and 33-48 as amended on 03/31/08 of copending Application No. 10/389,214 (and its teachings and suggestions in the specification on at least paragraphs 9, 12, 13, 17, 18, 21, 23, Examples 2, 4 and 5). Applicants, assignee and their counsel may and should disagree, urge and state on and for the record that each of the claims as originally filed is self sufficient. There has not been and will not be relied on any embodiment and any application for any purpose) considered in view of En et al ((2004/0134682) as a secondary reference).

Applicants in the applied application do not specify an alkali base. However, it is known in the art at the time the invention was made to obtain and use an alkali base for the advantage of providing a sufficient alkalinity and stripping power. Evidence can be seen in at least En et al at paragraph 0550, 0600, 0612, 0620, 0653, 0714, 0754 and 0774.

Since the above references are all related to cleaners and/or removers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite potassium hydroxide alkaline agent for a reasonable expectation of sufficiently providing an additional alkalinity and stripping power to one having ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's arguments filed 09/08/08 have been fully considered but they are not persuasive.

> As a matter of law, the test for obviousness-type double patenting is whether the claimed invention of the subject application would have been obvious from the subject matter of the claims in the cited reference, in light of the prior art. *See, In re Longi*, 225 U.S.P.Q. 645 (Fed. Cir. 1985). Further, the initial burden of establishing a *prima facie* case of obviousness is always on the Examiner. *In re Oetiker*, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992).
>
> Claim 1 of the present application recites, *inter alia*:
>
> **"A cleaning composition comprising a quaternary base, at least one alkali or alkaline earth base, and at least one additional component selected from the group consisting of a chelator, an oxirane species, and combinations thereof, wherein said chelator comprises a species selected from the group consisting of: 1-amino-1,2,4-triazole; 1-amino-1,2,3-triazole; 1-amino-5-methyl-1,2,3-triazole; 3-mercapto-1,2,4-triazole; 3-isopropyl-1,2,4-triazole; naphthotriazole; 2-mercaptobenzimidazole; 5-aminotetrazole; 5-amino-1,3,4-thiadiazole-2-thiol; 2,4-diamino-6-methyl-1,3,5-trinzine; triazine; methyltetrazole; 1,3-dimethyl-2-imidazolidinone; 1,5-pentamethylenetetrazole; 1-phenyl-5-mercaptotetrazole; diaminomethyltriazine; imidazoline thione; 4-methyl-4H-1,2,4-triazole-3-thiol; 5-amino-1,3,4-thiadiazole-2-thiol; tritolyl phosphate; indiazole; adenine; salicylamide; iminodiacetic acid; benzoguanamine; thiocyranuric acid; anthranilic acid; 3-mercaptopropanol; and combinations thereof . . . ."**

One of the applied "thiazole" compound has been canceled or removed from the amended claim 1 being acknowledged.

Claim 17 of co-pending application No. 10/389,214 (hereinafter the `214 application) recites:

> **"The cleaning solution of claim 7 wherein said chelator is one of a triazole, a thiazole, a tetrazole, an imidizole, a phosphate, a thiol, an azine, a glycerol, an amino acid, a carboxylic acid, an alcohol, an amide, and a quinoline."**

The Examiner is respectfully reminded that the test for obviousness-type double patenting is whether the claimed invention of the subject application would have been obvious from the subject matter of the claims in the cited reference, in light of the prior art. In the present case, given the large number of triazoles, thiazoles, tetrazoles, imidazoles, phosphates, thiols, azines, glycerols, amino acids, carboxylic acids, alcohols, amides, and quinolines (from claim 17 of the `214 application) that are known (and unknown) in the art, there is no motivation, teaching or suggestion for one skilled in the art to come up with the list enumerated in applicants' claim 1, specifically "1-amino-1,2,4-triazole; 1-amino-1,2,3-triazole; 4-amino-5-methyl-1,2,3-triazole; 3-mercapto-1,2,4-triazole; 3-isopropyl-1,2,4-triazole; naphthotriazole; 2-mercaptobenzimidazole; 5-aminotetrazole; 5-amino-1,3,4-thiadiazole-2-thiol; 2,4-diamino-6-methyl-1,3,5-triazine; triazine; methyltetrazole; 1,3-dimethyl-2-imidazolidinone; 1,5-pentamethylenetetrazole; 1-phenyl-5-mercaptotetrazole; diaminomethyltriazine; imidazoline thione; 4-methyl-4H-1,2,4-triazole-3-thiol; 5-amino-1,3,4-thiadiazole-2-thiol; tolyltriazole phosphate; indiazole; adenine; salicylamide; iminodiacetic acid; benzoguanamine; thiocyanuric acid; anthranilic acid; 3-mercaptopropanol; and combinations thereof."

En et al. does not cure this deficiency in any way. Although some azoles are discussed in En et al., they are discussed in reference to copper-azole complexes and not are recited in applicants` claim 1.

If the Examiner disagrees with this, it is the Examiner's burden to provide a reasoned argument why it would be obvious for one skilled in the art to come up with applicants` presently pending claims in view of at least the claims of the `214 application.

(1) Applicants look at the applied claim 7 alone with their arguments. It is insufficient. The record shows that the applied compounds are also on paragraph 18 of the applied specification.

(2) The record shows that En et al is applied for the teachings and/or suggestions of a use of an alkali base. Applicants have missed interpretations of the

rejection on the record and looked at a different direction in the applied reference than those on the record.

IV. In view of the amendment, (1) the prior art rejections mailed on 05/06/08 have been withdrawn, (2) new searches are made and (3) references are found.

V. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 5, 10, 15, 17, 18-21 and 53 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sato et al (5,849,467).

Sato et al disclose and teach a cleaning (stripping or removing) composition for an unexposed photoresist layer or its portion. The composition comprises an

effective amount of an alkaline compound or compounds (selected from at least potassium hydroxide and an organic quaternary ammonium hydroxide) and an effective amount of 1,3-dimethyl-2-imidazolidinone or with other water-miscible organic solvents. Please see the whole disclosure of the applied reference, especially at least on col.3:52 to 4:61, 5:41-48, 7:34-48, Examples 1, 5 and 8. Since Sato et al are reasonably disclosed and taught the above claimed embodiments, the claims are reasonably found to be anticipated by Sato et al.

In an alternative, the broad teachings and/or suggested are applied. The above claims are found to be rendered prima facie obvious by Sato et al.

VII. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-6, 10, 15, 17, 19-21, 53 and 56 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yokoi et al (2004/0259761 having been on the record in PTO-892 dated on 04/13/06).

Yokoi et al disclose and teach a cleaning (removing) composition for at least a soft portion of an exposed photoresist layer and contaminations. The composition comprises an effective amount of an organic quaternary ammonium hydroxide, an effective amount of potassium hydroxide and an effective amount of 1,3-dimethyl-2-imidazolidinone or with other water-miscible organic solvents. Please see the whole disclosure of the applied reference, especially at least on paragraphs 0032 to 0044, 0049 to 0052, Examples 3 and Comparative Example 2. Since Yokoi et al are reasonably disclosed and taught the above claimed embodiments, the claims are reasonably found to be anticipated by Yokoi et al.

In an alternative, the broad teachings and/or suggested are applied. The above claims are found to be rendered prima facie obvious by Yokoi et al.

VIII. Applicants' arguments to the applied prior art rejections in the Office action mailed on 05/06/08 with the amendments to the claims. In view of the amendments, the applied prior art in the Office action mailed on 05/06/08 have

been withdrawn. A correction is made that "Ward et al (7309559)" is not correct. The corrections are ---Natori et al (73095590)---(which has not yet been applied), ---Ward et al (5139607) which has been applied---.

IX. Claim 57 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

X. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday though Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoa V. Le/ Primary Examiner, Art Unit 1795 091208